

ABSTRACT OF THE DISCLOSURE

A method and apparatus for including in a processor instructions for performing integer transforms including multiply-add operations and horizontal-add operations on packed data. In one embodiment, a processor is coupled to a memory that stores a first packed byte data and a second packed byte data. The processor performs operations on said first packed byte data and said second packed byte data to generate a third packed data in response to receiving a multiply-add instruction. A plurality of the 16-bit data elements in this third packed data storing the result of performing multiply-add operations on data elements in the first and second packed byte data. The processor adds together at least a first and a second 16-bit data element of the third packed data in response to receiving an horizontal-add instruction to generate a 16-bit result as one of a plurality of data elements of a fourth packed data.